

December 10, 2003

MODIS sensor Working Group (MsWG) Summary

Attendance: Bill Barnes, Bob Barnes, Vincent Chiang, Gene Eplee, Wayne Esaias, Bob Evans, Chris Moeller, Vince Salomonson, Junqiang Sun, Gary Toller, Jack Xiong, Eric Vermote, Robert Wolfe, Zhengming Wan, Joe Esposito

Scheduled Items**Item 1 Instrument Status**

Terra SFE anomaly

JX) The anomaly occurred during a scheduled pattern test. MCST looked for impact after the test, Bands 8, 20, and 27 show MS switch in BB and SV. Only PV bands were affected, no PC problems due to the reset. The MS shift causes ~ 0.2-0.3% m1 change. A one dn change will have a larger effect on the land bands due to the SD screen being closed (previously, the land band dn response is roughly 12 times larger due to using open screen mode). Will reset again next week to try to recover the initial mode.

IOT – Bryan Breen- The SFE occurred on Nov. 30. Alarms triggered (bad direct broadcast). Every fourth byte is corrupted in direct broadcast, however, although the science data looks okay, the SFE has a significant effect.

Item 2 Calibration Related Issues

Stray light effects on the Solar Diffuser

RW) Only non-saturated RSB bands are analyzed. The data is from 15 orbits starting with 2003/183.2010, with the data being from after the SD door anomaly (SDS is closed). All values are band averages for all SD samples in a scan with both mirror sides used – smoothing is performed (3 scans, triangular weighting). The data is corrected for SD/sun cosine angle and SD BRF with additional smoothing performed in scan direction (21 scans, triangular weighting). No temperature correction was performed. Earthshine features are visible (bands 12 & 19).

JS) The closed SDS may cause vignetting that appears to be like stray light

RW) The stray light effect in sweet spot is small at SD radiances, +/- 0.2%, with the largest effect in band 8.

More analysis of stray light on SDSM needed.

Item 3 Aqua SST

BE) Aqua RVS problem in bands 31 and 32. Is there a plan for measuring the RVS or can inner door data be used to update the RVS.

JX) The inner door data is only good for relative mirror side RVS. The Aqua DSM is not presently scheduled. Please send the RVS symmetry chart(s) to MCST.

Around the Table

No Input this week.

Next MsWG meeting January 7, 2004